



## ***Advanced Computer Programming Project***

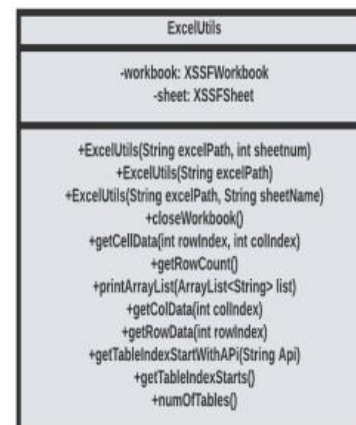
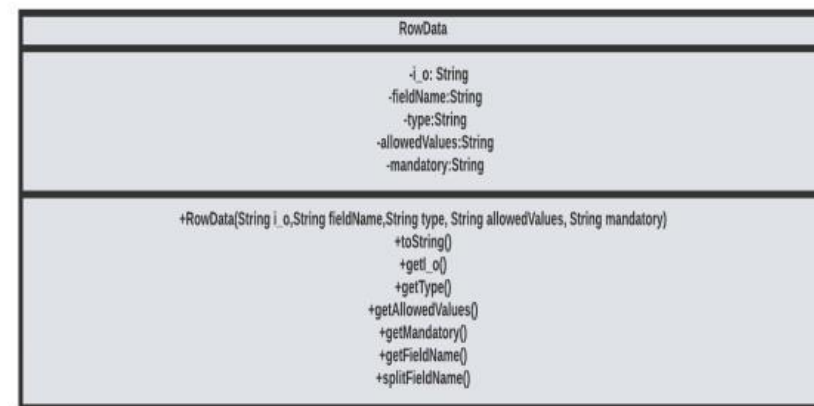
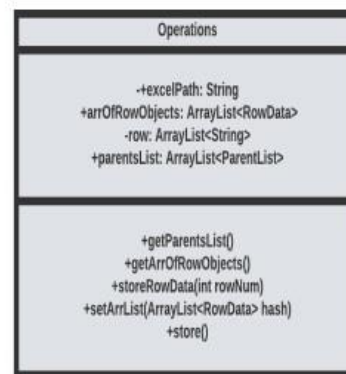
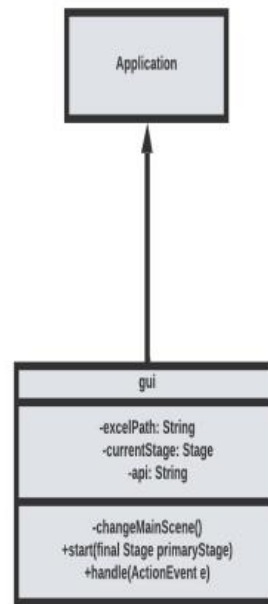
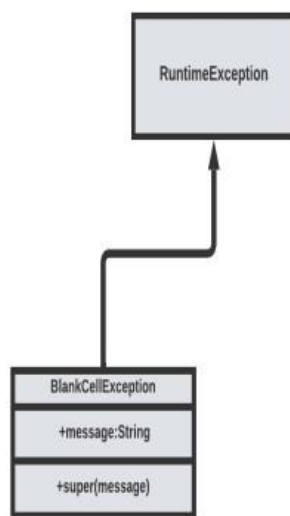
***Course Code:*** CSE231s

***Course Name:*** Advanced Computer Programming

***Course Committee:***

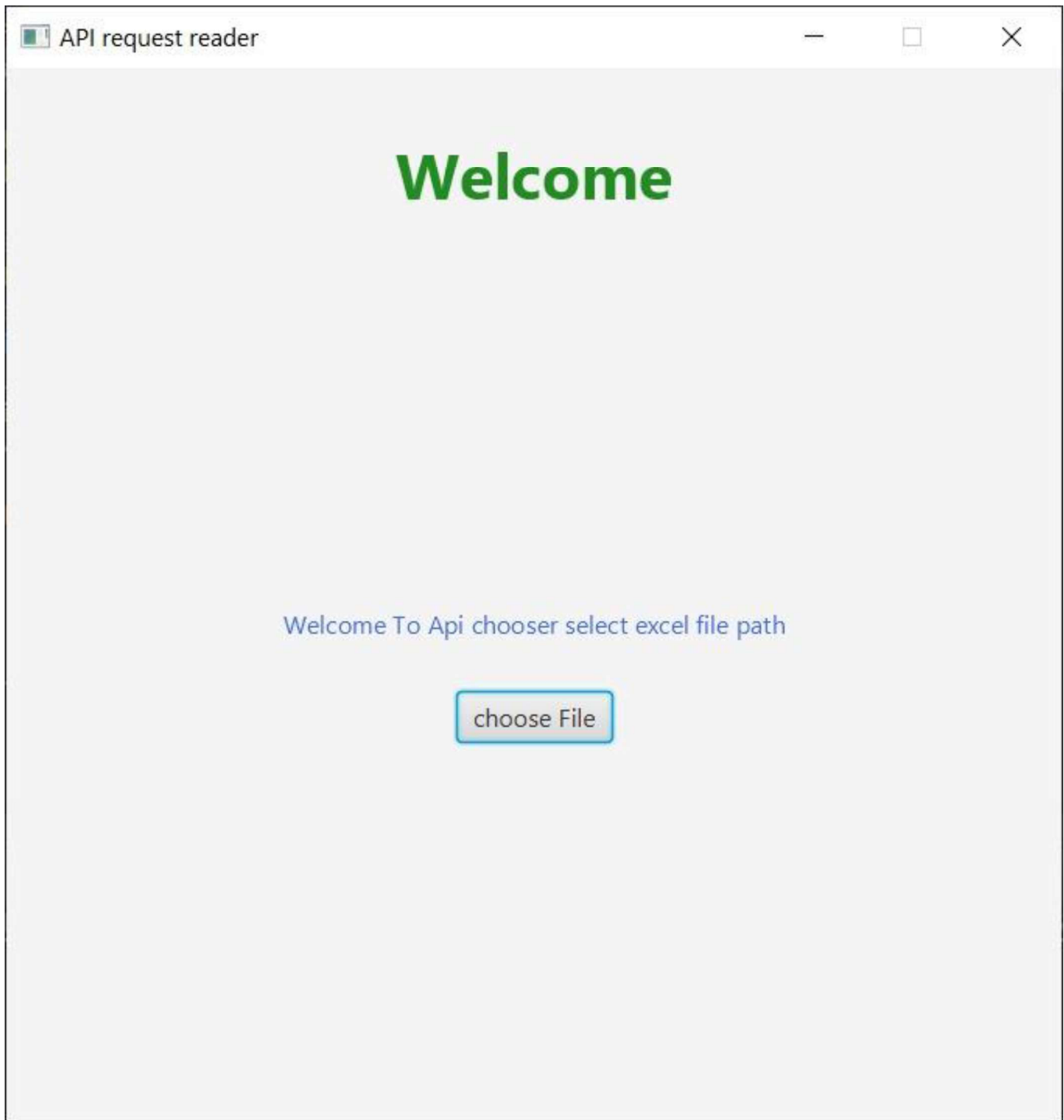
**Dr. Mahmoud Khalil**

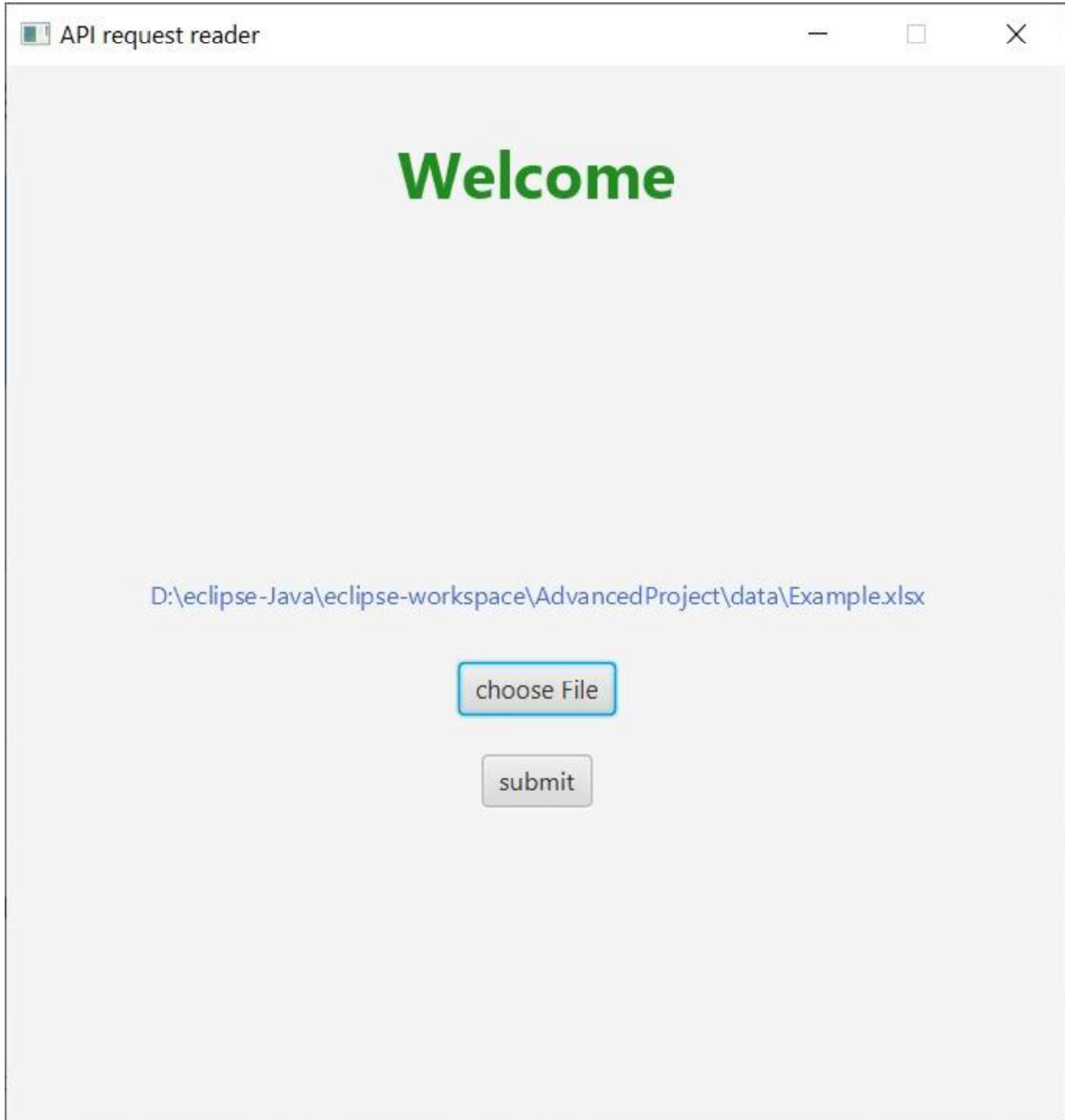
Ezz Eldin Ayman Abdalla Tawfik ElGebali	1901630	CSE
Abdalla Ibrahim Abdalla	1901685	CSE
Abdelmagid Mohamed Abdelmagid	1901691	CSE
Bassel Khaled Sayed	1901141	CSE





## 2\_Outputs of different api:







api 0

<p>object1: i/o: I type: object1 Allowed Values: ALL mandatory: Y</p> <p>CHILDREN</p> <p>field1: i/o: I type: string allowed Values: ALL Mandatory: Y</p> <p>field2: i/o: I type: string allowed Values: ALL Mandatory: Y</p> <p>field3: i/o: I type: string allowed Values: ALL Mandatory: Y</p> <p>field4:</p>	<p>object2: i/o: I type: object2 Allowed Values: ALL mandatory: Y</p> <p>CHILDREN</p> <p>field23: i/o: I type: string allowed Values: 1,2,3 Mandatory: N</p> <p>field6: i/o: I type: string allowed Values: Y,N Mandatory: N</p> <p>field7: i/o: I type: string allowed Values: ALL Mandatory: N</p> <p>field9:</p>	<p>field12: i/o: I type: string Allowed Values: ALL mandatory: Y</p>
<p>object3: i/o: O type: object3 Allowed Values: ALL mandatory: Y</p> <p>CHILDREN</p> <p>field12: i/o: O type: string allowed Values: ALL Mandatory: Y</p> <p>object4: i/o: O type: object4 allowed Values: ALL Mandatory: Y</p>	<p>object4: i/o: O type: object4 Allowed Values: ALL mandatory: Y</p> <p>CHILDREN</p> <p>field13: i/o: O type: string allowed Values: ALL Mandatory: Y</p> <p>field14: i/o: O type: string allowed Values: ALL Mandatory: Y</p>	



api 1

object1:  
i/o: I  
type: object1  
Allowed Values: ALL  
mandatory: Y

CHILDREN

field1:  
i/o: I  
type: string  
allowed Values: ALL  
Mandatory: Y

field2:  
i/o: I  
type: string  
allowed Values: ALL  
Mandatory: Y

field3:  
i/o: I  
type: string  
allowed Values: ALL  
Mandatory: Y

field4:  
i/o: I  
type: string  
allowed Values: ALL  
Mandatory: Y

object2:  
i/o: I  
type: object2  
Allowed Values: ALL  
mandatory: Y

CHILDREN

field23:  
i/o: I  
type: string  
allowed Values: 1,2,3  
Mandatory: N

field6:  
i/o: I  
type: string  
allowed Values: Y,N  
Mandatory: N

field7:  
i/o: I  
type: string  
allowed Values: ALL  
Mandatory: N

field9:  
i/o: I  
type: string  
allowed Values: ALL  
Mandatory: N

field12:  
i/o: I  
type: string  
Allowed Values: ALL  
mandatory: Y

object3:  
i/o: O  
type: object3  
Allowed Values: ALL  
mandatory: Y

CHILDREN

field12:  
i/o: O  
type: string  
allowed Values: ALL  
Mandatory: Y

object4:  
i/o: O  
type: object4  
allowed Values: ALL  
Mandatory: Y

object4:  
i/o: O  
type: object4  
Allowed Values: ALL  
mandatory: Y

CHILDREN

field13:  
i/o: O  
type: string  
allowed Values: ALL  
Mandatory: Y

field14:  
i/o: O  
type: string  
allowed Values: ALL  
Mandatory: Y



api 2

object1:  
i/o: I  
type: object1  
Allowed Values: ALL  
mandatory: Y

CHILDREN

field1:  
i/o: I  
type: string  
allowed Values: ALL  
Mandatory: Y

field2:  
i/o: I  
type: string  
allowed Values: ALL  
Mandatory: Y

field3:  
i/o: I  
type: string  
allowed Values: ALL  
Mandatory: Y

field4:

object2:  
i/o: I  
type: object2  
Allowed Values: ALL  
mandatory: Y

CHILDREN

field5:  
i/o: I  
type: string  
allowed Values: 1,2,3  
Mandatory: N

field6:  
i/o: I  
type: string  
allowed Values: Y,N  
Mandatory: N

field7:  
i/o: I  
type: string  
allowed Values: ALL  
Mandatory: N

field9:

object3:  
i/o: O  
type: object3  
Allowed Values: ALL  
mandatory: Y

CHILDREN

field12:  
i/o: O  
type: string  
allowed Values: ALL  
Mandatory: Y

object4:  
i/o: O  
type: object4  
allowed Values: ALL  
Mandatory: Y

field12:  
i/o: I  
type: string  
Allowed Values: ALL  
mandatory: Y

CHILDREN

field13:  
i/o: O  
type: string  
allowed Values: ALL  
Mandatory: Y

field14:  
i/o: O  
type: string  
allowed Values: ALL  
Mandatory: Y





api 3

object1: i/o: null type: null Allowed Values: null mandatory: null	object2: i/o: I type: object2 Allowed Values: ALL mandatory: Y	field16: i/o: I type: string Allowed Values: ALL mandatory: Y
CHILDREN	CHILDREN	
field4: i/o: I type: string allowed Values: ALL Mandatory: N	field5: i/o: I type: string allowed Values: 1,2,3 Mandatory: N	
object2: i/o: I type: object2 allowed Values: ALL Mandatory: Y	field6: i/o: I type: string allowed Values: Y,N Mandatory: N	
field12: i/o: I type: string allowed Values: ALL Mandatory: Y	field3: i/o: I type: string allowed Values: ALL Mandatory: Y	
field1:	field9:	
field12: i/o: I type: string Allowed Values: ALL mandatory: Y	object3: i/o: O type: object3 Allowed Values: ALL mandatory: Y	
	CHILDREN	
	field12: i/o: O type: string allowed Values: ALL Mandatory: Y	
	object4: i/o: O type: object4 allowed Values: ALL Mandatory: Y	